

The Applicant has noted that the contents of the Office Action are on pages 2 and 3; however, the relevance of this text is not clear and as a result the Applicant has taken no action.

On page 4 of the Office Action, the Examiner rejects claims 11, 12, 15, 16, and 18 under 35 U.S.C. §102(e) as being anticipated by the teaching of United States Patent No. 6,817,193 to Caesar et al. The Caesar et al. patent is directed to a method for operating a refrigerant circuit whereby as stated in column 1, lines 40-42, the refrigerant mass flow in the circuit is controlled by adjusting various parameters, in particular the torque and rotational speed, in the compressor. Additionally, as stated in column 2, lines 14-16, the refrigerant circuit is operated such that the refrigerant is almost completely liquefied in the refrigerant circuit upstream of the restrictor means. As further stated in lines 45-47 of column 2, such an approach makes it simple to achieve an output or comfort control of the refrigeration circuit by using knowledge of the refrigerant flow mass. As a result, there is no need to measure the temperature of the air downstream of the evaporator. The method disclosed in the Caesar et al. patent is restricted to a refrigerant circuit in which the compressor is driven by an internal combustion engine of a vehicle and is therefore taught to be torque controlled.

In accordance with the teaching of Caesar et al., the refrigerant mass flow and hence the necessary torque for the compressor can be easily determined from measured temperatures and pressures at different points of the circuit. On the other hand, in accordance with the invention of the present application, or found in amended claim 11, the onset of the evaporation process is controlled by measuring and using as a control variable for the control of the expansion valve, the evaporator pressure at the inlet of the evaporator and the refrigerant supercooling temperature upstream of the expansion valve.

This is a totally different control scheme which is independent of the compressor drive and not restricted by requirements of an internal combustion engine of a motor vehicle.

The limitation of measuring the evaporation pressure at the end of the evaporator as a first control variable and measuring the refrigerant supercooling temperature upstream of the expansion valve as a second control variable, for the control of the expansion valve, are neither taught nor suggested by the Caesar et al. patent. For these reasons the Applicant does not believe that claim 11 is anticipated by or made obvious by the teaching of the Caesar et al. patent.

By way of their dependence upon what is believed to be patentably distinct, independent claim 11 and dependent claims 12, 15, 16, and 18 are themselves believed to be patentably distinct over the Caesar et al. patent.

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On page 6 of the Office Action, the Examiner rejects claims 17 and 21 under 35 U.S.C. §103 (a) as being obvious from the teaching of the Caesar et al. patent in view of the teaching of Japanese Patent No. JP-2002267279 to Yoshihiko. By way of their dependence upon what is believed to be patentably distinct, independent claim 11 and dependent claims 17 and 21 are themselves believed to be patentably distinct over the prior art of record.

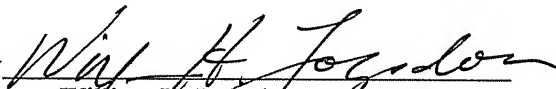
On page 7 of the Office Action, the Examiner rejects claims 13 and 14 under 35 U.S.C. §103(a) as being obvious from the teaching of the Caesar et al. patent in view of the teaching of European Patent No. EP-1014013 to Shunji et al. Once again by way of their dependence about what is believed to be patentably distinct, in independent claim 11 and dependent claims 13 and 14 are themselves believed to be patentably distinct over the prior art of record.

On page 8 of the Office Action, the Examiner rejects claims 18-20 and 22-26 under 35 U.S.C. §103(a) as being obvious from the teaching of the Caesar et al. patent as applied to claim 11 above. Once again by way of their dependence upon what is believed to be patentably distinct, independent claim 11 and dependent claims 18-20 and 22-26 are themselves believed to be patentably distinct over the prior art of record.

Reconsideration and allowance of pending claims 11-26 are respectfully requested.

Respectfully submitted,

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